

DEAV2004-0025.txt  
SEQUENCE LISTING

<110> Aventis Pharma Deutschland GmbH

<120> dual-transfected cell lines as in vitro screening tools for pharmaceutical compound profiling: A model for hepatobiliary elimination.

<130> DEAV 2004/0025

<160> 6

<170> PatentIn version 3.2

<210> 1

<211> 1061

<212> DNA

<213> Homo sapiens

<400> 1

caggaggatg	gaggcccaca	acgcgtctgc	cccattcaac	ttcacccctgc	cacccaactt	60
tggcaagcgc	cccacagacc	tggcaactgag	cgtcatcctg	gtttcatgt	tgttcttcat	120
catgctctcg	ctgggctgca	ccatggagtt	cagcaagatc	aaggctcact	tatggaagcc	180
taaagggctg	gccatcgccc	tggtggcaca	gtatggcata	atgcccctca	cggcctttgt	240
gctgggcaag	gtcttccggc	tgaagaacat	tgaggcactg	gccatcttgg	tctgtggctg	300
ctcaccttga	gggaacctgt	ccaatgtctt	cagtctggcc	atgaagggggg	acatgaacct	360
cagcattgtg	atgaccacct	gtctccacctt	ctgtccctt	ggcatgatgc	ctctccctcct	420
gtacatctac	tccaggggga	tctatgtatgg	ggacctgtaa	gacaagggtgc	cctataaaagg	480
catcgtgata	tcaactggtcc	tggttctcat	tccttgcacc	atagggatcg	tcctcaaatac	540
taaacggcca	caatacatgc	gctatgtcat	caagggaggg	atgatcatca	ttctcttgc	600
cagtgtggcc	gtcacagttc	tctctgcccc	caatgtgggg	aagagcatca	tgtttgcccc	660
gacaccactc	ttgattgcca	cctccccc	gatgccttct	attggcttgc	tgctgggtta	720
tgttctctct	gctctttct	gcctcaatgg	acgggtcaga	cgcactgtca	gcatggagac	780
tggatgccaa	aatgtccaa	tctgttccac	catcctcaat	gtggccttgc	cacctaagt	840
cattggacca	ctttcttct	ttccccc	ctacatgatt	ttccagcttgc	gagaagggtct	900
tctccctcatt	gccatatttt	ggtgctatga	gaaattcaag	actcccaagg	ataaaaacaaa	960
aatgatctac	acagctgcca	caactgaaga	aacaattcca	ggagctctgg	gaaatggcac	1020
ctacaaaggg	gaggactgct	ccccctgcac	agcctagcccc	t		1061

<210> 2

<211> 3966

<212> DNA

<213> Homo sapiens

<400> 2

atgtctgact	cagtaattct	tcgaagtata	aagaaatttg	gagaggagaa	tatggtttt	60
gagtcagata	aatcatataaa	taatgataa	aatcaaggt	tacaagatga	gaagaaaggt	120
gatggcgta	gagttggctt	ctttcaattt	tttcgggtttt	cttcatcaac	tgacattttgg	180

## DEAV2004-0025.txt

ctgatgtttg tggaaagttt gtgtgcattt ctccatggaa tagcccagcc aggcgtgcta	240
ctcattttg gcacaatgac agatgtttt attgactacg acgttgagtt acaagaactc	300
cagattccag gaaaagcatg tgtgaataac accattgtat ggactaacag ttcccctcaac	360
cagaacatga caaatggAAC acgttgtggg ttgctgaaca tcgagAGCga aatgatcaa	420
tttgccagtt actatgtgg aattgctgtc gcagtactta tcacaggata tattcaaata	480
tgctttggg tcattGCCGC agctcgtag atacagaaaa tgagaaaaatt ttactttagg	540
agaataatga gaatggaaat agggtggTTT gactgcaatt cagtggggGA gctgaataca	600
agattctctg atgatattaa taaaatcaat gatGCCATAG ctgacCCAAAT ggccCTTTC	660
attcagCGCA tgacCTCGAC catctgtgg ttcctgtgg gatTTTcAG gggTTggAAA	720
ctgaccTTGG ttattatTC tgcAGCCCT ctCATGGGA ttggAGCAGC caccATTGgt	780
ctgagtGTgt ccaagTTTAC ggactatgag ctGAAGGcCT atGCCAAAGC agggGTggTg	840
gctgatgaag tcatttcatc aatgagaaca gtggctgCTT ttggTggTga gaaaagagag	900
gttGAAAGGT atgagaaaaa tcttGtGttc gcccAGCgtt gggGAattAG aaaAGGAATA	960
gtgatggat tcttactgg attcgtgtgg tgtctcatct ttttGtGTTA tgcaCTGGCC	1020
ttctggTAcG gctccacACT tgcTCTGGAT gaaggAGAAT atacACCAGG aaccCTTGTc	1080
cagatttcc tcagtGTcat agtaggAGCT ttaaatCTTG gcaatGCCtC tcCTTGTtTg	1140
gaagCCTTg caactGGACG tgcAGCAGC ACCAGCATTt ttgAGACAAt agACAGGAAA	1200
cccatcATTG actGcatGTC agaAGATGGT tacaAGTTG atcGAATCAA gggTgAAatt	1260
gaattCCATA atGtGACCTT ccattatCCT tccAGACCAG aggtGAAGAt tctAAAtGAC	1320
ctcaacatgg ccattAAACC agggAAATG acAGCTCTGG taggACCCAG tggAGCTGGA	1380
aaaAGTACAG cactGCAACT cattcAGCGA ttctatGACC CCTGTGAAGG aatGGTgACC	1440
gtggatGGCC atGACATTGc ctctCTTAAC attcAGTGGC ttAGAGATCA gattGGGATA	1500
gtggAGCAAG AGCCAGTTCT gttctCTAcc accATTGcAG AAAATATTGc CTATGGCAGA	1560
gaAGATGCAA caatGGAAAGA catAGTCCAA gctGCCAAGG aggCCAAATGC ctacaACTTC	1620
atcatGGACC tgCCACAGCA atttGACACC CTTGTTGGAG aaggAGGAGG CCAGATGAGT	1680
ggTggCCAGA aacaAAAGGt agCTATGCC AGAGCCCTCA tccGAAATCC caAGATTCTG	1740
cttttggaca tggccACCTC AGCTCTGGAC aatGAGAGTg aagCCATGGT gcaAGAGTg	1800
ctgagtaAGA ttCAAGCATGG gcACACAAATC attcAGTTG CTCATCGCTT GtCTACGGTC	1860
AGAGCTGcAG ataccatcat tggTTTgAA catGGCActG cAGTGGAAAG aggGACCCAT	1920
gaagaATTAC tggAAAGGAA aggtGTTTAC ttCACTCTAG tgACTTTGCA aAGCCAGGGA	1980
aatcaAGCTC ttaatGAAGA ggACATAAAG gATGCAACTG aAGATGACAT gCTTGCAGG	2040
ACCTTTAGCA gagggAGCTA CCAGGATAGT ttaAGGGCTT CCACTCCGGCA ACgCTCCAAG	2100
tctcAGCTT CTTACCTGgt gCACGAACCT CCATTAGCTG ttGAGATCA TAAGTCTACC	2160
tatGAAGAAG atAGAAAGGA CAAGGACATT CCTGTGCAGG aAGAAGTTGA ACCTGCCCA	2220

## DEAV2004-0025.txt

gttaggagga ttctgaaatt cagtgcctca gaatggccct acatgctggt agggctgtg	2280
ggtcagctg tgaacgggac agtcacaccc ttgtatgcct ttttattcag ccagatttt	2340
gggactttt caattcctga taaagaggaa caaaggtcac agatcaatgg tgtgtgccta	2400
ctttttgtag caatgggctg tgtatcttt ttcacccaat ttctacaggg atatgcctt	2460
gctaaatctg gggagctcct aacaaaaagg ctacgtaaat ttggtttcag ggcaatgctg	2520
gggcaagata ttgcctgggt tgatgacctc agaaatagcc ctggagcatt gacaacaaga	2580
cttgctacag atgcttcca agttcaaggg gctgcccgt ctcagatcgg gatgatagtc	2640
aattccttca ctaacgtcac tgtggccatg atcattgcct tctcctttag ctggaaagctg	2700
agcctggtca tcttgtcctt cttcccccttc ttggctttat caggagccac acagaccagg	2760
atgttgacag gatttgccctc tcgagataag caggccctgg agatggtggg acagattaca	2820
aatgaagccc tcagtaacat ccgcactgtt gctgaaattt gaaaggagag gcggttcatt	2880
gaagcacttg agactgagct ggagaagccc ttcaagacag ccattcagaa agccaatatt	2940
tacggattct gcttgcctt tgcccaagtgc atcatgttta ttgcgaattc tgcttcctac	3000
agatatggag gttacttaat ctccaaatgag gggctccatt tcagctatgt gttcagggtg	3060
atctctgcag ttgtactgag tgcaacagct cttgaaagag ctttctctta caccccaagt	3120
tatgaaaag ctaaaatatac agctgcacgc tttttcaac tgctggaccg acaacccca	3180
atcagtgat acaatactgc aggtaaaaaa tgggacaact tccaggggaa gattgattt	3240
gttgattgta aatttacata tccttctcga cctgactcgc aagttctgaa tggtctctca	3300
gtgtcgatta gtccagggca gacactggcg tttgtggga gcagtggatg tggcaaaagc	3360
actagcattc agctgttggaa acgtttctat gatcctgatc aagggaaaggt gatgatagat	3420
ggtcatgaca gcaaaaaagt aaatgtccag ttccctcgct caaacattgg aattgtttcc	3480
caggaaccag tggatgtttgc ctgttagata atggacaata tcaagtatgg agacaacacc	3540
aaagaaattc ccatggaaag agtcatagca gctgaaaaac aggctcagct gcatgatTTT	3600
gtcatgtcac tcccagagaa atatgaaact aacgttgggt cccaggggtc tcaactctct	3660
agaggggaga aacaacgcat tgctattgct cggccattt tacgagatcc taaaatcttgc	3720
ctactagatg aagccacttc tgccttagac acagaaagtgg aaaagacgggt gcagggtgct	3780
ctagacaaag ccagagaggg tcggacctgc attgtcattt cccatcgctt gtccaccatc	3840
cagaacgcgg atatcattgc tgtcatggca cagggggtgg tgattgaaaa ggggacccat	3900
gaagaactga tggccaaaa aggagcctac tacaaacttag tcaccactgg atccccatc	3960
agttga	3966

<210> 3  
 <211> 4650  
 <212> DNA  
 <213> Homo sapiens  
 <400> 3

DEAV2004-0025.txt

agtccaggaa	tcatgctgga	gaagttctgc	aactctactt	tttggaaattc	ctcattcccg	60
gacagtcgg	aggcagaccc	gccactttgt	tttgagcaaa	ctgttctgg	gtggattccc	120
ttgggcttcc	tatggctcct	ggccccctgg	cagttctcc	acgtgtataa	atccaggacc	180
aagagatcct	ctaccaccaa	actctatctt	gctaaggcagg	tattcgttgg	ttttcttctt	240
attcttagcag	ccatagagct	ggcccttgt	ctcacagaag	actctggaca	agccacagtc	300
cctgctgttc	gatataccaa	tccaagcctc	tacctaggca	catggctcct	ggttttgctg	360
atccaataaca	gcagacaatg	gtgtgtacag	aaaaactcct	ggttcctgtc	cctattctgg	420
attctctcga	tactctgtgg	cactttccaa	tttcagactc	tgatccggac	actcttacag	480
ggtgacaatt	ctaattctagc	ctactcctgc	ctgttcttca	tctcctacgg	attccagatc	540
ctgatcctga	tctttcagc	attttcagaa	aataatgagt	catcaaataa	tccatcatcc	600
atagcttcat	tcctgagtag	cattacctac	agctggatg	acagcatcat	tctgaaaggc	660
tacaagcgtc	ctctgacact	cgaggatgtc	tgggaagttg	atgaagagat	gaaaaccaag	720
acatttagtga	gcaagtttga	aacgcacatg	aagagagagc	tgcagaaaagc	caggcgggca	780
ctccagagac	ggcaggagaa	gagctccag	cagaactctg	gagccaggct	gcctggcttg	840
aacaagaatc	agagtcaaag	ccaagatgcc	cttgccttgg	aagatgttga	aaagaaaaaa	900
aagaagtctg	ggacaaaaaa	agatgttcca	aaatcctgg	tgatgaaggc	tctgttcaaa	960
actttctaca	tggtgctcct	gaaatcattc	ctactgaagc	tagtgaatga	catcttcacg	1020
tttgtgagtc	ctcagctgct	gaaattgctg	atctcccttgc	caagtgaccg	tgacacatat	1080
tttgtggattt	gatatctctg	tgcaatccctc	ttatttactg	cggtctctcat	tcagtctttc	1140
tgccttcagt	gttatttcca	actgtgcttc	aagctgggtg	taaaagtacg	gacagctatc	1200
atggcttctg	tatataagaa	ggcattgacc	ctatccaact	tggccaggaa	ggagtacacc	1260
gttggagaaa	cagtgaacct	gatgtctgt	gatgcccaga	agctcatgga	tgtgaccaac	1320
ttcatgcaca	tgctgtggtc	aagtgttcta	cagattgtct	tatctatctt	cttcctatgg	1380
agagagttgg	gaccctcagt	cttagcaggt	gttgggggtg	tggtgcttgc	aatcccaatt	1440
aatgcgatac	tgtccaccaa	gagtaagacc	attcaggtca	aaaatatgaa	gaataaaagac	1500
aaacgtttaa	agatcatgaa	tgagattctt	agtggaaatca	agatcctgaa	atattttgcc	1560
tgggaacctt	cattcagaga	ccaagtacaa	aaccccgga	agaaaagagct	caagaacctg	1620
ctggccctta	gtcaactaca	gtgtgtagta	atattcgtct	tccagttAAC	tccagtccctg	1680
gtatctgtgg	tcacatTTTc	tgtttatgtc	ctggtgata	gcaacaatat	tttggatgca	1740
caaaaggcct	tcacctccat	taccctcttc	aatatcctgc	gctttccct	gagcatgctt	1800
cccatgatga	tctccctccat	gctccaggcc	agtgttcca	cagagcggct	agagaagtac	1860
ttgggagggg	atgacttgg	cacatctgcc	attcgacatg	actgcaattt	tgacaaagcc	1920
atgcagtttt	ctgaggcctc	cttacctgg	gaacatgatt	cggaaGCCAC	agtccgagat	1980
gtgaacctgg	acattatggc	aggccaaactt	gtggctgtga	taggcccgt	cggctctggg	2040

DEAV2004-0025.txt

aaatcctcct	tgatatacagc	catgctggga	gaaatggaaa	atgtccacgg	gcacatcacc	2100
atcaaggcga	ccactgccta	tgtcccacag	cagtcctgga	ttcagaatgg	caccataaaag	2160
gacaacatcc	tttttggAAC	agagtttaat	gaaaagaggt	accagcaagt	actggaggcc	2220
tgtgctctcc	tcccagactt	ggaaatgctg	cctggaggag	atttggctga	gattggagag	2280
aagggtataa	atcttagtgg	gggtcagaag	cagcggatca	gcctggccag	agctacctac	2340
caaaaatttag	acatctatct	tctagatgac	cccctgtctg	cagtggatgc	tcatgttagga	2400
aaacatatTTT	tttaataaggt	tttggggcccc	aatggcctgt	tgaaaaggcaa	gactcgactc	2460
tttggtracac	atagcatgca	ctttcttcct	caagtggatg	agattgtagt	tctggggaat	2520
ggaacaattt	tagagaaagg	atcctacagt	gctctccctgg	ccaaaaaaagg	agagtttgct	2580
aagaatctga	agacatttct	aagacatACA	ggccctgaag	aggaagccac	agtccatgat	2640
ggcagtgaag	aagaagacga	tgactatggg	ctgatatacca	gtgtggaaaga	gatccccgaa	2700
gatgcagcct	ccataaccat	gagaagagag	aacagcttTC	gtcgaacact	tagccgcagt	2760
tctaggtCCA	atggcaggca	tctgaagtCC	ctgagaaaact	ccttgaaaac	tcggaatgtg	2820
aatagcctga	aggaagacga	agaactagtG	aaaggacaaa	aactaattaa	gaaggaattc	2880
atagaaactg	gaaaggtgaa	gttctccatC	tacctggagt	acctacaAGC	aataggattg	2940
ttttcgatAT	tcttcatcat	ccttgcgttt	gtgatgaatt	ctgtggctt	tattggatCC	3000
aacctctggc	tcagtgcTTG	gaccagtGAC	tctaaaatCT	tcaatAGCAC	cgactatCCA	3060
gcatctcaga	gggacatgag	agttggagTC	tacggagCTC	tgggattAGC	ccaaggTATA	3120
tttgtttca	tagcacatTTT	ctggagtGCC	tttgggTTTCG	tccatGCATC	aaatatCTG	3180
cacaagcaac	tgctgaacAA	tatccttcGA	gcacctatGA	gatTTTTGA	cacaacacCC	3240
acaggccgga	ttgtgaacAG	gttgccggc	gatatttCCA	cagtggatGA	caccctgcct	3300
cagtccttgc	gcagctggat	tacatgcTT	ctggggataa	tcagcacCC	tgtcatgatC	3360
tgcatggCCA	ctccTGTCTT	caccatCATC	gtcattCCTC	ttggcattat	ttatgtatCT	3420
gttcagatgt	tttatgtgtc	tacctcccgc	cagctgaggc	gtctggactc	tgtcaccagg	3480
tcccccaatCT	actctcaCTT	cagcgagACC	gtatcaggTT	tgccagTTat	ccgtgcctt	3540
gagcaccAGC	agcgatttCT	gaaacacaAT	gaggtgagGA	ttgacacCAA	ccagaaATGT	3600
gtctttcct	ggatcacCTC	caacaggTGG	cttgcaattC	gcctggagCT	ggttgggAAC	3660
ctgactgtCT	tctttcAGC	cttgatgtG	gttatttATA	gagataccCT	aagtggggAC	3720
actgttggCT	ttttctgtc	caatgcACTC	aatatCACAC	aaaccctgaa	ctggctggTG	3780
aggatgacat	cagaaatAGA	gaccaacATT	gtggctgttg	agcgaataAC	tgagtacACA	3840
aaagtggAAA	atgaggcacc	ctgggtgact	gataagaggc	ctccGCCAGA	ttggcccAGC	3900
aaaggcaaga	tccagttaa	caactacAA	gtgcggTacc	gacctgagCT	ggatctggTC	3960
ctcagaggGA	tcacttgta	cattggTAGC	atggagaAGA	ttgggtgtggT	gggcaggAGA	4020
ggagctggAA	agtcatccCT	cacaaactGC	ctcttcAGAA	tcttagaggc	tgccggTggT	4080

DEAV2004-0025.txt	
cagattatca	ttgatggagt agatattgct tccattggc tccacgacct ccgagagaag 4140
ctgaccatca	tccccagga ccccatcctg ttctctggaa gcctgaggat gaatctcgac 4200
ccttcacaaca	actactcaga tgaggagatt tggaggcct tggagctggc tcacctaag 4260
tctttgtgg	ccagcctgca acttgggtta tcccacgaag tgacagaggc tggtgccaac 4320
ctgagcatag	gccagaggca gctgctgtgc ctgggcaggg ctctgcttcg gaaatccaaag 4380
atcctggtcc	tggatgaggc cactgctgcg gtggatctag agacagacaa cctcattcag 4440
acgaccatcc	aaaacgagtt cgcccactgc acagtgtatca ccatcgccca caggctgcac 4500
accatcatgg	acagtgacaa ggtaatggtc ctagacaacg ggaagattat agagtgcggc 4560
agccctgaag	aactgctaca aatccctgga ccctttact ttatggctaa ggaagctggc 4620
attgagaatg	tgaacagcac aaaattctag 4650

<210> 4  
<211> 6433  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Plasmid

<400> 4  
gacggatcgg gagatctccc gatcccctat ggtgcactct cagtacaatc tgctctgatg 60  
ccgcatagtt aagccagtat ctgctccctg ctttgtgtt ggaggcgct gagtagtgcg 120  
cgagcaaaat ttaagctaca acaaggcaag gcttgaccga caartgcatg aagaatctgc 180  
ttagggttag gcgtttgcg ctgcttcgcg atgtacgggc cagatatacg cgttgacatt 240  
gattattgac tagttattaa tagtaatcaa ttacggggtc attagttcat agcccatata 300  
tggagttccg cgttacataa cttacggtaa atggcccgcc tggctgaccg cccaacgacc 360  
cccgccccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc 420  
attgacgtca atgggtggag tatttacggt aaactgccc a cttggcagta catcaagtgt 480  
atcatatgcc aagtacgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt 540  
atgcccagta catgacctta tgggactttc ctacttggca gtacatctac gtattagtca 600  
tcgctattac catggtgatg cggtttggc agtacatcaa tggcgtgga tagcggtttg 660  
actcacgggg atttccaagt ctccacccca ttgacgtcaa tggagtttgc tttggcacc 720  
aaaatcaacg ggactttcca aaatgtcgta acaactccgc cccattgacg caaatggcg 780  
gtaggegtgt acgggtggag gtcttatataa gcagagctct ctggctaact agagaaccca 840  
ctgcttactg gcttatcgaa attaatacga ctcaactatacg ggagacccaa gctggctagc 900  
gtttaaactt aagcttggta ccgagctcg atcccgaggag gatggaggcc cacaacgcgt 960  
ctgccccatt caacttcacc ctgccacccca actttggcaa gcgcacccaca gaccctggcacc 1020  
tgagcgtcat cctgggttgc atgttggtct tcatacatgct ctcgctggc tgcaccatgg 1080  
agttcagcaa gatcaaggct cacttatggaa agcctaaagg gctggccatc gccctgggg 1140

DEAV2004-0025.txt

cacagtatgg catcatgccc	ctcacggcct ttgtgtggg	caagggtcttc	cggtgaaga	1200
acattgaggc actggccatc	ttgggtctgtg	gctgctcacc	tggagggAAC	1260
tcttcagtct ggccatgaag	ggggacatga	acctcagcat	tgtgtatgacc	1320
ccttctgtgc cttggcatg	atgcctctcc	tcctgtacat	ctactccagg	1380
atggggacct gaaggacaag	gtgccctata	aaggcatgt	gatatcactg	1440
tcattccttg caccataggg	atcgctctca	aatctaaacg	gccacaatac	1500
tcatcaaggg agggatgatc	atcattctt	tgtgcagtgt	ggccgtcaca	1560
ccatcaatgt ggggaagagc	atcatgttt	ccatgacacc	actcttgatt	1620
ccctgatgcc ttctattggc	tttctgtgg	gttatgttct	ctctgctctc	1680
atggacggtg cagacgcact	gtcagcätgg	agactggatg	ccaaaatgtc	1740
ccaccatcct caatgtggcc	tttccacctg	aagtcatgg	accactttc	1800
tcctctacat gatttccag	cttggagaag	ggcttctct	cattgccata	1860
atgagaaatt caagactccc	aaggataaaa	aaaaaatgt	ctacacagct	1920
aagaaacaat tccaggagct	ctggaaatg	gcacctacaa	aggggaggac	1980
gcacagccta gcccttctag	agggcccgtt	taaaccgct	gatcgcctc	2040
tctagttgcc agccatctgt	tgttgtcccc	tcccccgtgc	cttccttgac	2100
gccactcca ctgtccttcc	ctaataaaat	gaggaaattt	catcgcatgg	2160
tgtcattcta ttctgggggg	tgggtgggg	caggacagca	agggggagga	2220
aatagcaggg atgctgggg	tgccgtgggc	tctatggctt	ctgaggcgg	2280
tggggctcta ggggtatcc	ccacgcgc	tgtacggcg	cattaagcgc	2340
gtggttacgc gcagcgtgac	cgctacactt	gccagcgc	tagcgcgc	2400
ttcttcctt ctttctcg	cacgttgc	ggcttcccc	gtcaagctt	2460
ctcccttag gttccgatt	tagtgc	cgacccctcg	acccaaaaaa	2520
ggtgatggtt cacgtatgg	gccatgc	tgatagacgg	ttttcgccc	2580
gagtccacgt tcttaatag	tggactctt	ttccaaactg	gaacaacact	2640
tcggtctatt ctttgattt	ataagggatt	ttgccgattt	cggcctattt	2700
gagctgattt aacaaaaatt	taacgcgaat	taattctgt	aatgtgtgt	2760
gtggaaagtc cccaggctcc	ccagcaggca	gaagtatgca	aagcatgcat	2820
cagcaaccag gtgtggaaag	tccccaggt	ccccagcagg	cagaagtatg	2880
atctcaatta gtcagcaacc	atagtcccgc	ccctaactcc	gcccattcccc	2940
cggccatgttc cgcccattct	ccggccatg	gtgactat	tttttttatt	3000
ccgaggccgc ctctgcctct	gagctattcc	agaagtatg	aggaggctt	3060
taggcttttgc aaaaagctc	ccgggagctt	gtatatccat	tttcggatct	3120
caggatgagg atcgtttgc	atgattgaac	aagatggatt	gcacgcaggt	3180

DEAV2004-0025.txt

cttgggtgga gaggctattc ggctatgact gggcacaca gacaatcgac tgctctgatg	3240
ccgcgtgtt ccggctgtca gcgcaggggc gcccggttct ttttgtcaag accgacctgt	3300
ccgggtccct gaatgaactg caggacgagg cagcgcggct atcgtggctg gccacgacgg	3360
gcgttccttg cgca gctgtc tcgcacgttg tcactgaagc gggaaaggac tggctgctat	3420
tgggcgaagt gcccggcag gatctccgt catctcacct tgctcctgcc gagaaaagtat	3480
ccatcatggc ttagtgcata gggcggctgc atacgcttga tccggctacc tgcccattcg	3540
accaccaagc gaaacatcgc atcgagcggag cacgtactcg gatggaaagcc ggtcttgcg	3600
atcaggatga tctggacgaa gaggcatcagg ggctcgcgc agccgaactg ttgcgcaggc	3660
tcaaggcgcg catgcccggc ggcgaggatc tcgtcgac ccattggcgat gcctgcttgc	3720
cgaatatcat ggtggaaaat ggccgccttt ctggattcat cgactgtggc cggctgggtg	3780
tggcggaccg ctatcaggac atagcgttgg ctacccgtga tattgctgaa gagcttggcg	3840
gcgaatgggc tgaccgccttc ctcgtctt acggtatcgcc cgctcccgat tcgcagcgca	3900
tcgccttcta tcgccttctt gacgagttct tctgagcggg actctgggt tcgaaatgac	3960
cgaccaagcg acggcccaacc tgccatcactg agatttcgat tccaccggccg ccttctatga	4020
aagggttgggc ttccgaatcg ttttccggga cgccggctgg atgatccctcc agcgcgggaa	4080
tctcatgctg gagttcttcg cccaccccaa cttgtttatt gcagcttata atggttacaa	4140
ataaaagcaat agcatcacaa atttcacaaa taaagcattt ttttactgc attctagttt	4200
tggtttgtcc aaactcatca atgtatctta tcatgtctgt ataccgtcgat cctctagacta	4260
gagcttggcg taatcatggt catagctgtt tcctgtgtga aattgttatac cgctcacaat	4320
tccacacaac atacgagccg gaagcataaa gtgtaaagcc tgggggtgcct aatgagttag	4380
ctaactcaca ttaattgcgt tgcgctcaact gcccgccttc cagtcgggaa acctgtcg	4440
ccagctgcat taatgaatcg gccaacgcgc ggggagaggc ggtttgcgtt ttgggcgtc	4500
ttccgccttc tcgctcaactg actcgctgcg ctggcgtt cggctgcggc gagcggatc	4560
agctcaactca aaggcggtaa tacggttatc cacagaatca ggggataacg caggaaagaa	4620
catgtgagca aaaggccagc aaaaggccag gaaccgtaaa aaggccgcgt tgctggcg	4680
tttccatagg ctccgcggcc ctgacgagca tcacaaaaat cgacgctcaa gtcagaggtg	4740
gcgaaacccg acaggactat aaagatacca ggcgtttccc cctggaagct ccctcgctg	4800
ctctccgtt ccgaccctgc cgcttaccgg atacctgtcc gccttctcc cttcggaaag	4860
cgtggcgtt tctcatagct cacgctgttagt gtatctcagt tcgggttagg tcgttcgtc	4920
caagctggc tgggtgcacg aaccccccgt tcagccgcac cgctgcgcct tatccggtaa	4980
ctatcgctt gagtccaaacc cggtaagacg cgacttacg ccactggcag cagccactgg	5040
taacaggatt agcagagcga ggtatgttagg cgggtgcata gagttcttga agtgggtggcc	5100
taactacggc tacactagaa gaacagtatt tggtatctgc gctctgctga agccagttac	5160
cttcggaaaa agagttggta gctcttgatc cggcaaacaa accaccgcgtg gtagcggttt	5220

DEAV2004-0025.txt

ttttgttgc aagcagcaga ttacgcgcag	aaaaaaaggta tctcaagaag atcctttgat	5280
cttttctacg gggctcgacg ctcagtggaa	cggaaaactca cgtaaggga ttttggcat	5340
gagattatca aaaaggatct tcaccttagat	ccttttaaat taaaaatgaa gttttaaattc	5400
aatctaaagt atatatgagt aaacttggtc	tgacagttac caatgcttaa tcagtgaggc	5460
acctatctca gcgatctgtc tatttcgttc	atccatagtt gcctgactcc ccgtcggt	5520
gataactacg atacgggagg gcttaccatc	tggccccagt gctgcaatga taccgcgaga	5580
cccacgctca ccggctccag atttatcagc	aataaaccag ccagccggaa gggccgagcg	5640
cagaagtggt cctgcaactt tatccgcctc	catccagtct attaattgtt gccgggaagc	5700
tagagtaagt agttcgccag ttaatagttt	gcgcaacgtt gttgccattg ctacaggcat	5760
cgtggtgtca cgctcgctgt ttggtatggc	ttcattcagc tccgggttccc aacgatcaag	5820
gcgagttaca tgatccccca tgggtgc	aaaagcggtt agtccttcg gtcctccgat	5880
cgttgcaga agtaagttgg ccgcagtgtt	atcactcatg gttatggcag cactgcataa	5940
ttctcttact gtcatgccat ccgtaagatg	ctttctgtg actggtgagt actcaaccaa	6000
gtcattctga gaatagtgtt tgccgcgacc	gagttgcgtc tgccggcgt caatacgga	6060
taataccgcg ccacatagca gaactttaaa	agtgcgtatc attggaaaac gttcttcggg	6120
gcgaaaactc tcaaggatct taccgctgtt	gagatccagt tcgatgtaac ccactcg	6180
acccaactga tcttcagcat cttttacttt	caccagcggt tctgggtgag caaaaacagg	6240
aaggcaaaat gcccaaaaaaaaa agggaataag	ggcgacacgg aaatgttcaa tactcata	6300
cttcctttt caatattattt gaagcattt	tcagggttat tgtctcatga gcggatacat	6360
atttgaatgt atttagaaaa ataaacaaat	aggggttccg cgcacatttc cccgaaaagt	6420
gccacctgac gtc		6433

<210> 5  
<211> 9043  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Plasmid

<400> 5  
gacggatcgg gagatctccc gatccctat ggtcgactct cagatacaatc tgctctgatg      60  
ccgcatagtt aagccagtat ctgctccctg cttgtgttt ggaggtcgct gagtagtgcg      120  
cgagcaaaat ttaagctaca acaaggcaag gcttgcaccga caattgcatt aagaatctgc      180  
ttagggttag gcgtttgcg ctgcttcgcg atgtacgggc cagatatacg cggtgacatt      240  
gattattgac tagttattaa tagtaatcaa ttacgggttc attagttcat agccatata      300  
tggagttccg cttacatcaa cttacggtaa atggccgcg tggctgaccg cccaaacgacc      360  
cccgccctt gacgtcaata atgacgtatg ttccatagt aacgccaata gggactttcc      420  
attgacgtca atgggtggac tatttacggt aaactgcccc a cttggcagta catcaagtgt      480

DEAV2004-0025.txt

atcatatgcc	aagtacgccc	cctattgacg	tcaatgacgg	taaatggccc	gcctggcatt	540				
atgcccagta	catgaccta	tgggactt	tc	ta	ctactggca	gtacatctac	gtattagtca	600		
tcgctattac	catggtgatg	cgg	ttt	ggc	agtacatcaa	tggcg	tgg	660		
actcacgggg	at	ttcca	agt	ctccacccca	ttgacgtcaa	tgg	gat	tttggcacc	720	
aaaatcaacg	ggacttcca	aaatgtcgta	acaactccgc	cccattgacg	caa	atggcg	cg	780		
gtaggcgtgt	acgg	tttggag	gtctatataa	gcagagctct	ctgg	c	taact	agagaaccca	840	
ctgcttactg	gcttatcgaa	attaatacga	ctcactatag	ggagacccaa	gctgg	c	tag	ctac	900	
gtttaaactt	aagctatcac	aagttgtac	aaaaa	aggcag	gctt	tagga	at	gtctgactca	960	
gtaattcttc	gaagtataaa	gaaat	tttgg	gaggagaat	atgg	ttt	gat	gtcagataaa	1020	
tcatataata	atgataagaa	atcaagg	tt	caagatgaga	aga	aaagg	gt	tg	gcgtt	1080
gttggcttct	ttcaattgtt	tcgg	ttt	tc	atcaact	ac	at	ttgg	ct	1140
ggaagtttgt	gtgcatttct	ccatg	gaata	gccc	aggccag	gc	gt	ctact	cat	1200
acaatgacag	atgttttat	tgactacgac	gtt	gagtt	ac	aaact	cc	gat	cc	1260
aaagcatgtg	tgaataaacac	catt	gtatgg	acta	acagtt	cc	ctcaacca	ga	acatgaca	1320
aatggaacac	gtt	gtgg	ttt	gct	gaacat	tc	gag	ca	tttgg	1380
tatgctggaa	ttg	ctgtcgc	ag	tactt	ac	aggat	at	ta	at	1440
attgccgcag	ctcg	tcag	at	ac	aaaat	g	aaaat	ttt	aggag	1500
atggaaatag	ggt	gg	ttt	gt	caatt	tc	gggg	tg	ata	1560
gatattaata	aaat	caat	tg	ccat	ag	ccaa	at	tg	cc	1620
acctcgacca	tct	gtgg	ttt	cct	gtgg	tt	ttt	cat	tc	1680
attatttctg	tcag	ccct	tc	catt	gg	g	cc	at	gt	1740
aagttacgg	actat	gag	ct	ga	gg	cc	ttt	gt	gt	1800
at	tt	cat	ca	tg	gt	ctt	ttt	tg	tt	1860
gagaaaaatc	tt	gt	tt	tc	cc	ag	ctt	gg	tt	1920
tttactggat	tc	gt	gt	gg	t	ct	tc	tt	at	1980
tccacactt	tc	ct	gg	at	g	ca	cc	tt	tc	2040
agtgtcatag	tag	gag	ctt	aa	at	tt	gg	tt	tc	2100
actggacgtg	cag	cag	cc	at	tc	tt	gg	tt	tc	2160
tgcatgtcag	aa	at	gg	tt	ca	at	cc	at	tt	2220
gtgac	tt	cc	tt	cc	ca	ac	cc	at	gg	2280
attaaaccag	gg	aa	at	g	ac	cc	ag	tt	gg	2340
ctgcaactca	tt	cag	cg	at	t	at	g	ac	cc	2400
gacattcgct	c	t	c	t	a	c	t	g	ca	2460
ccagttctgt	t	c	t	t	a	c	t	g	ca	2520

11/19

12/19

DEAV2004-0025.txt	
ccagagaaaat atgaaactaa	4620
cgttgggtcc cagggtctc	
aactctctag aggggagaaa	
caacgcattg ctattgtcg	4680
ggccattgt a gagatccta	
aatcttgct actagatgaa	
gccacttctg ccttagacac	4740
agaaaagtcaa aagacggtgc	
aggttgctct agacaaagcc	
agagagggtc ggacctgcat	4800
tgtcattgcc catcgttgt	
ccaccatcca gaacgcggat	
atcattgtcg tcatggcaca	4860
gggggtggtg attgaaaagg	
ggacccatga agaactgatg	
gccccaaaag gagcctacta	4920
caaactagtc accactggat	
ccccccatcag ttgagaccca	
gctttcttgt acaaagtgt	4980
gattggtacc gagctcgat	
ccactagtcc agtgtggtg	
aattctgcag atatccagca	5040
cagtggcgc cgctcagtc	
tagagggccc gtttaaaccc	
gctgatcagc ctcgactgtg	5100
ccttcttagtt gccagccatc	
tgttggttgc ccctcccccg	
tgccttcctt gaccctggaa	5160
ggtgccactc ccactgtcct	
ttcctaataa aatgagggaaa	
ttgcatcgca ttgtctgagt	5220
aggtgtcatt ctattctgg	
gggtgggtg gggcaggaca	
gcaaggggaa ggattggaa	5280
gacaatagca ggcattctgg	
ggatgcggtg ggctctatgg	
cttctgaggc ggaaagaacc	5340
agctgggct ctaggggta	
tccccacgcg ccctgtagcg	
gcccattaaag cgccgcgggt	5400
gtgggtggta cgccgacgt	
gaccgctaca cttgccagcg	
ccctagcgcc cgctccttc	5460
gctttcttc cttccttct	
cgccacgttc gccggcttc	
cccgtaagc tctaaatcgg	5520
ggcatccctt tagggttccg	
atttagtgc ttacggcacc	
tcgaccccaa aaaacttgat	5580
tagggtgatg gttcacgtag	
tggccatcg ccctgtataga	
cggttttcg cccttgacg	5640
ttggagtcca cgttcttaa	
tagtgactc ttgttccaaa	
ctggaacaac actcaaccct	5700
atctcggtct attctttga	
tttataaggg attttgggaa	
tttcggccta ttggtaaaaa	5760
aatgagctga tttacaaaaa	
atthaacgcg aattaattct	
gtggaatgtg tgtagttag	5820
ggtgtggaaa gtccccaggc	
tccccaggca ggcagaagta	
tgcaaagcat gcattctcaat	5880
tagtcagcaa ccagggtgtgg	
aaagtccccca ggctccccag	
caggcagaag tatgcaaagc	5940
atgcattctca attagtcagc	
aaccatagtc ccgccccctaa	
ctccgccccat cccgccccata	6000
actccgcccc gttccgcccc	
ttctccgcccc catggctgac	
taatttttt tatttatgca	6060
gaggccgagg ccgcctctgc	
ctctgagcta ttccagaagt	
agtgaggagg cttttttgga	6120
ggcctaggct tttgaaaaaa	
gctccgggaa gcttgtatata	
ccattttcgg atctgatcag	6180
cacgtgttga caattaatca	
tcggcatagt atatcgcat	
agtataatac gaçaaggtga	6240
ggaactaaac catggccaag	
ttgaccagtg ccgttccggt	
gctcaccgcg cgccgacgtcg	6300
ccggagcggt cgagttctgg	
accgaccggc tcgggttctc	
ccgggacttc gtggaggacg	6360
acttcgcccc tgtggtccgg	
gacgacgtga ccctgttcat	
cagcgcggtc caggaccagg	6420
ttgtgccccaa caacaccctg	
gcctgggtgt gggtgccgg	
cctggacgag ctgtacgccc	6480
agtggtcgga ggtcgtgtcc	
acgaacttcc gggacgcctc	
cggggccggcc atgaccgaga	6540
tcggcgagca gccgtggggg	
cgggagttcg ccctgcgcga	
ccccggccggc aactgcgtgc	6600
acttcgtggc cgaggagcag	
gactgacacg tgctacgaga	

DEAV2004-0025.txt

tttcgattcc accggccgcct tctatgaaag gttgggcttc ggaatcgaaa tccgggacgc	6660
cggctggatg atcccccagc gcggggatct catgtggag ttcttcgccc accccaaactt	6720
gtttattgca gcttataatg gttacaataa aagcaatgc atcacaaatt tcacaaataa	6780
agcattttt tcactgcatt ctatgtgg ttgtccaaa ctcataatg tatcttatca	6840
tgtctgtata ccgtcgcacct ctagctagag cttggcgtaa tcatggtcat agctgtttcc	6900
tgtgtgaaat tggtatccgc tcacaattcc acacaacata cgagccggaa gcataaaagt	6960
taaaggcctgg ggtgcctaatt gagtgagcta actcacatta attgcgttgc gctcactgccc	7020
cgctttccag tcgggaaacc tgctcgccatcgatccaa tgaatcggcc aacgcgcggg	7080
gagaggcggt ttgcgtattt ggctcgatcc cgtttcccg ctcactgact cgctgcgc	7140
ggtcgttcgg ctgcggcgag cggatcagc tcactcaaag gcggtaatac gggttatccac	7200
agaatcaggg gataacgcag gaaagaacat gtgagcaaaa ggccagcaaa aggccaggaa	7260
ccgtaaaaag gccgcgttgc tggcgaaaaa ccataggctc cggcccccgt acgagcatca	7320
caaaaatcga cgctcaagtc agagggtggcg aqaccgcaca ggactataaa gataccaggc	7380
gtttcccccgtt ggaagctccc tcgtcgccatcccttcccg accctgcgcgc ttaccggata	7440
cctgtccgcctt ccgttccctt cggaaagcgtt ggcgcgttctt caatgctcac gctgttaggt	7500
tctcagttcg gtgttaggtcg ttgcgtccaa gctggctgt gtgcacgaac ccccccgttca	7560
gccccgaccgc tgcccttat ccgttaacta tcgtcttgc tccaaaccgg taagacacga	7620
cttatacgcca ctggcagcag ccactggtaa caggattagc agagcgaggt atgttaggcgg	7680
tgctacagag ttcttgaagt ggtggctaa ctacggctac actagaagga cagtattttgg	7740
tatctgcgtt ctgctgaagc cagttaccc tggaaaaaaa gttggtagctt cttgatccgg	7800
caaacaacc accgctggta gcggtggttt ttttggatcc aagcagcaga ttacgcgcag	7860
aaaaaaaaagga tctcaagaag atcccttgc ttttcttgc gggctgacg ctcagtgaa	7920
cggaaaactca cgttaaggaa ttttggatcc gagattatca aaaaggatct tcaccttagat	7980
ccttttaaat taaaaatgaa gttttaaatc aatctaaagt atatatgagt aaacttggtc	8040
tgacagttac caatgcttaa tcgtggggc acctatctca gcgtatcgatc tatttcgttc	8100
atccatagtt gcctgactcc ccgtcgatcc gataactacg atacggggagg gcttaccatc	8160
tggccccagt gctgcaatga taccgcgaga cccacgcgtca ccggctccag attttatcagc	8220
aataaaccag ccagccggaa gggccgagcg cagaagggtt cctgcaactt tatccgcctc	8280
catccagttt attaattgtt gccggggaaagc tagagtaagt agttcgccag ttaatagttt	8340
gcgcacgtt gttgccattt ctacaggcat cgtgggtgtca cgctcgatcc ttggatggc	8400
ttcattcagc tccgggttccca aacgatcaag gcggatccaa tgatccccca tggatggc	8460
aaaagggtt agctccctcg gtcctccgat cgttgcaga agtaagttgg ccgcagtgtt	8520
atcactcatg gttatggcag cactgcataa ttctcttact gtcatgcgcac ccgtaaatgt	8580
ctttctgtg actgggtgagt actcaaccaa gtcattctga gaatagtgtt tgccggcgacc	8640

14/19

## DEAV2004-0025.txt

gagttgctct	tgcccgccgt	caatacggga	taataccgcg	ccacatagca	gaactttaaa	8700
agtgctcatc	attggaaaac	gttcttcggg	gcgaaaactc	tcaaggatct	taccgctgtt	8760
gagatccagt	tcgatgtaac	ccactcgtgc	acccactga	tcttcagcat	cttttacttt	8820
caccagcgtt	tctgggttag	caaaaacagg	aaggcaaaat	gccgaaaaaa	agggataaag	8880
ggcgacacgg	aatgttcaa	tactcatact	cttccttttt	caatattatt	gaagcattta	8940
tcagggttat	tgtctcatga	gcggatacat	atttgaatgt	atttagaaaa	ataaacaaat	9000
aggggttccg	cgcacatttc	cccgaaaagt	gccacctgac	gtc		9043

&lt;210&gt; 6

&lt;211&gt; 9658

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence .

&lt;220&gt;

&lt;223&gt; Plasmid

&lt;400&gt; 6

gacggatcgg	gagatctccc	gatcccctat	ggtcgactct	cagtacaatc	tgctctgatg	60
ccgcatagtt	aagccagtat	ctgctccctg	cttgtgtgtt	ggaggtcgct	gagtagtgcg	120
cggacaaaat	ttaagctaca	acaaggcaag	gcttgaccga	caattgcatg	aagaatctgc	180
ttagggttag	gcgtttgcg	ctgcttcgcg	atgtacgggc	cagatatacg	cgttgacatt	240
gattattgac	tagttattaa	tagtaatcaa	ttacgggttc	attagttcat	agcccatata	300
tggagttccg	cgttacataa	cttacggtaa	atggccgc	tggctgaccg	cccaacgacc	360
cccgccccatt	gacgtcaata	atgacgtatg	ttcccatagt	aacgccaata	gggactttcc	420
attgacgtca	atgggtggac	tatttacggt	aaactgccc	cttggcagta	catcaagtgt	480
atcatatgcc	aagtacgccc	cctattgacg	tcaatgacgg	taaatggccc	gcctggcatt	540
atgcccagta	catgaccta	tgggacttcc	ctacttggca	gtacatctac	gtattagtca	600
tcgcttattac	catggtgatg	cgggtttggc	agtacatcaa	tggcgtgga	tagcggttt	660
actcacgggg	atttccaagt	ctccacccca	ttgacgtcaa	tggagttt	ttttggcacc	720
aaaatcaacg	ggactttcca	aatgtcgta	acaactccgc	cccattgacg	caaatggcgc	780
gtaggcgtgt	acgggtggag	gtctatataa	gcagagctct	ctggcttaact	agagaaccca	840
ctgcttactg	gcttatcgaa	attaatacga	ctcaactatag	ggagacccaa	gctggcttagc	900
agtccaggaa	tcatgctgga	gaagttctgc	aactctactt	tttggaaattc	ctcattcctg	960
gacagtccgg	aggcagacac	tttgcaccc	tttgcaccc	tttgcaccc	tttgcaccc	1020
ttgggcttcc	tatggctcct	ggccccctgg	cagcttctcc	acgtgtataa	atccaggacc	1080
aagagatcct	ctaccaccaa	actctatctt	gctaagcagg	tattcgttgg	ttttcttctt	1140
attcttagcag	ccatagagct	ggcccttgc	ctcacagaag	actctggaca	agccacagtc	1200
cctgctgttc	gatataccaa	tccaaaggcc	tacctaggca	catggctcct	gggtttgctg	1260
atccaatacaca	gcagacaatg	gtgtgtacag	aaaaactcct	ggttccgtc	cctattctgg	1320

DEAV2004-0025.txt

attctctcgatactctgtgg	cactttccaa	tttcagactc	tgatccggac	actcttacag	1380	
ggtacaatt	ctaatctagc	ctactcctgc	ctgttcttca	tctcctacgg	attccagatc	1440
ctgatcctga	tctttcagc	attttcagaa	aataatgagt	catcaaataa	tccatcatcc	1500
atagcttcat	tcctgagtag	cattacctac	agctggatg	acagcatcat	tctgaaaggc	1560
tacaaggcgc	ctctgacact	cgaggatgtc	tggaaagttg	atgaagagat	gaaaaccaag	1620
acattagtga	gcaagttga	aacgcacatg	aagagagagc	tgcagaaaagc	caggcgggca	1680
ctccagagac	ggcaggagaa	gagctcccg	cagaactctg	gagccaggct	gcctggcttg	1740
aacaagaatc	agagtcaaag	ccaagatgcc	cttgcctgg	aagatgttga	aaagaaaaaa	1800
aagaagtctg	ggaccaaaaa	agatgttcca	aaatccctgt	tgatgaaggc	tctgttcaaa	1860
actttctaca	tggtgtctct	gaaatcattc	ctactgaagc	tagtgaatga	catcttcacg	1920
tttgtgagtc	ctcagctgct	gaaattgctg	atctcccttg	caagtgaccg	tgacacatat	1980
tttgtggattg	gatatctctg	tgcaatccctc	ttattctactg	cggtctctcat	tcagtctttc	2040
tgccctcagt	gttatttcca	actgtgcttc	aagctgggtg	taaaagtacg	gacagctatc	2100
atggcttctg	tatataagaa	ggcattgacc	ctatccaact	tggccaggaa	ggagtacacc	2160
gttggagaaa	cagtgaacct	gatgtctgt	gatgcccaga	agctcatgga	tgtgaccaac	2220
ttcatgcaca	tgctgtggtc	aagtgttcta	cagattgtct	tatctatctt	cttcctatgg	2280
agagagttgg	gaccctcagt	cttagcaggt	gttgggggtga	tggtgcttgt	aatcccaatt	2340
aatgcgatac	tgtccaccaa	gagtaagacc	attcaggtca	aaaatatgaa	gaataaaagac	2400
aaacgtttaa	agatcatgaa	tgagattctt	agtggaaatca	agatcctgaa	atattttgcc	2460
tggAACCTT	cattcagaga	ccaagtacaa	aacctccgga	agaaagagct	caagaacctg	2520
ctggcTTTA	gtcaactaca	gtgtgttagta	atattcgtct	tccagttAAC	tccagtccctg	2580
gtatctgtgg	tcacatTTTC	tgttatgtc	ctggggata	gcaacaatAT	tttggatgca	2640
caaaaggcct	tcacCTCCAT	taccCTCTTC	aatatCCTGC	gCTTCCCCCT	gagcatgctt	2700
cccatgatga	tctCCTCCAT	gCTCCAGGCC	agtgtttCCA	cagagcggct	agagaagtac	2760
ttgggggggg	atgacttggA	cacatctGCC	attcgcacatg	actgcaattt	tgacaaagcc	2820
atgcagTTTT	ctgaggcCTC	ctttacCTGG	gaacatgatt	cggaagccac	agtccgagat	2880
gtgaacctgg	acattatggc	aggccAACTT	gtggctgtGA	tagGCCCTGT	cggtctctgg	2940
aaatCCCTCT	tgatATCAGC	catgctggA	gaaatggAAA	atgtccacgg	gcacatcacc	3000
atcaaggGCA	ccactgccta	tgtcccacag	cagtccctggA	ttcagaatgg	caccataaaag	3060
gacaacatCC	tttttggAAC	agagTTTAA	gaaaagaggt	accagcaagt	actggaggcc	3120
tgtgctCTCC	tcccagACTT	ggaaatgCTG	cctggaggag	atttggctGA	gattggagag	3180
aagggtataa	atCTTAGTGG	gggtcagaag	cagcggatca	gcctggccag	agctacctac	3240
aaaaatttag	acatctatCT	tctagatgac	ccccTGTCTG	cagtggatgc	tcatgttagga	3300
aaacatatTT	ttaataaggt	cttggggcccc	aatggccTGT	tgaaaggcaa	gactcgactc	3360

DEAV2004-0025.txt

ttggttacac atagcatgca	ctttcttcct caagtggatg	agattgttagt tctggggaat	3420
ggaacaattg tagagaaagg atcctacagt	gctctcctgg caaaaaaagg	agagtttgct	3480
aagaatctga agacatttct aagacatata	ggccctgaag aggaagccac	agtccatgat	3540
ggcagtgaag aagaagacga	tgactatggg ctgatatcca	gtgtggaaaga gatccccgaa	3600
gatcgaccc	ccataaccat gagaagagag	aacagcttc gtcgaacact tagccgcagt	3660
tcttaggtcca atggcaggca	tctgaagtcc ctgagaaact	ccttgaaaac tcggaatgtg	3720
aatagcctga aggaagacga	agaactagtg aaaggacaaa	aactaattaa gaaggaattc	3780
atagaaactg gaaaggtgaa	gttctccatc tacctggagt	acctacaagc aataggattg	3840
ttttcgatat tcttcatcat	ccttgcgttt gtgatgaatt	ctgtggcttt tattggatcc	3900
aacctctggc tcagtgcctg	gaccagtgc tacaaaaatct	tcaatagcac cgactatcca	3960
gcatctcaga gggacatgag	agttggagtc tacggagctc	tgggattagc ccaaggtata	4020
tttgtgttca tagcacattt	ctggagtgcc tttggtttcg	tccatgcac aaatatctg	4080
cacaagcaac tgctgaacaa	tatccttcga gcacctatga	gatttttga cacaacaccc	4140
acaggccgga ttgtgaacag	gtttgccggc gatatttcca	cagtggatga caccctgcct	4200
cagtccttgc gcagctggat	tacatgcctc ctggggataa	tcagcaccct tgtcatgatc	4260
tgcatggcca ctccgtctt	caccatcatc gtcattcctc	ttggcattat ttatgtatct	4320
gttcagatgt ttatgtgtc	tacctccgc cagctgaggc	gtctggactc tgtcaccagg	4380
tccccaatct actctcactt	cagcgagacc gtatcaggtt	tgccagttat ccgtgcctt	4440
gagcaccagc agcgatttct	gaaacacaat gaggtgagga	ttgacaccaa ccagaaatgt	4500
gtctttcct ggatcacctc	caacaggtgg cttgcaattc	gcctggagct gggtgggaac	4560
ctgactgtct tctttcagc	cttgatgatg gttatttata	gagataccct aagtggggac	4620
actgttggct ttgttctgtc	caatgcactc aatacacac	aaaccctgaa ctggctggtg	4680
aggatgacat cagaataga	gaccaacatt gtggctgttgc	agcgaataac tgagtacaca	4740
aaagtggaaa atgaggcacc	ctgggtgact gataagaggc	ctccgcccaga ttggcccaagc	4800
aaaggcaaga tccagtttaa	caactaccaa gtgcggtacc	gacctgagct ggatctggtc	4860
ctcagagggc	tcacttgtga cattggtagc	atggagaaga ttgggtgttgt gggcaggaca	4920
ggagctggaa agtcatccct	cacaaaactgc ctttcagaa	tcttagggc tgccgggttgt	4980
cagattatca ttgtatggagt	agatattgtct tccatgggc	tccacgacct ccgagagaag	5040
ctgaccatca tccccagga	ccccatccctg ttctctggaa	gcctgaggat gaatctcgac	5100
ccttcaaca actactcaga	tgaggagatt tggaaggcct	tggagctggc tcacctaag	5160
tcttttgtgg ccagctgca	acttgggtta tcccacgaag	tgacagaggc tggtggcaac	5220
ctgagcatag gccagaggca	gctgctgtgc ctggcagggg	ctctgcttcg gaaatccaag	5280
atcctggtcc tggatgaggc	cactgctgcgtggatctag	agacagacaa cctcattcag	5340
acgaccatcc aaaacgagtt	cgcccactgc acagtgatca	ccatcgccca caggctgcac	5400

17/19

DEAV2004-0025.txt	
accatcatgg acagtgacaa ggtaatggtc ctagacaacg ggaagattat agagtgcggc	5460
agccctgaag aactgctaca aatcccgttga ccctttact ttatggctaa ggaagctggc	5520
attgagaatg tgaacagcac aaaattctag cttaagcttg gtaccgagct cggatccact	5580
agtccagtgt ggtggaattc tgcagatatac cagcacagtg gcggccgctc gagtctagag	5640
ggcccgttta aacccgctga tcagcctcga ctgtcccttc tagttgccag ccatctgttq	5700
tttgccttc cccctgtcct tccttgaccc tggaagggtgc cactcccact gtccttcct	5760
aataaaatga ggaatttgc tcgcattgtc tgagtaggtg tcattctatt ctggggggtg	5820
gggtggggca ggacagcaag ggggaggatt gggaaagacaa tagcaggcat gctggggatg	5880
cggtgggctc tatggcttct gaggcggaaa gaaccagctg gggctctagg gggatcccc	5940
acgcgcctg tagcggcgca ttaagcgcgg cgggtgtggt ggttacgcgc agcgtgaccg	6000
ctacacttgc cagcgcctta gcgcggcctc cttcgcttt cttcccttcc tttctcgcca	6060
cgttcggccgg ctttccccgt caagctctaa atcggggcat cccttttaggg ttccgattta	6120
gtgctttacg gcacctcgac cccaaaaaac ttgatttaggg tgatggttca cgtagtggc	6180
catcgcctcg atagacggtt ttcgcctt tgacgttgg gtcacgttcc tttaatagt	6240
gactcttgtt ccaaactgga acaacactca accctatctc ggtctattct ttgatttat	6300
aagggatttt ggggatttcg gcctatttgtt taaaaaatga gctgatttaa caaaaattta	6360
acgcgaatta attctgttgg atgtgtgtca gtttaggtgt gggaaagtccc caggctcccc	6420
aggcaggcag aagtatgcaa agcatgcac tcaattagtc agcaaccagg tgtggaaagt	6480
ccccaggctc cccagcaggc agaagtatgc aaagcatgca tctcaattag tcagcaacca	6540
tagtcccgcc cctaactccg cccatccgc ccctaactcc gcccagttcc gcccattctc	6600
cgccccatgg ctgactaatt ttttttattt atgcagaggc cgaggccgccc tctgcctctg	6660
agctattcca gaagtagtga ggaggcttt ttggaggcct aggctttgc aaaaagctcc	6720
cgggagcttgc tatatccatt ttcggatctg atcagcacgt gttgacaatt aatcatcgcc	6780
atagtatatac ggcatagtat aatacgacaa ggtgaggaac taaaccatgg ccaagttgac	6840
cagtggcgtt ccgggtctca ccgcgcgcga cgtcggcggga gcgggtcgagt tctggaccga	6900
ccggctcgggg ttctccggg acttcgttgg ggacgacttc gccgggtgtgg tccgggacga	6960
cgtgaccctg ttcatcagcg cggccagga ccaggtggtg ccggacaaca ccctggcctg	7020
ggtgtgggtg cgccgcctgg acgagctgtc cgccgagtgg tcggaggctg tgtccacgaa	7080
cttccgggac gcctccgggc cggccatgac cgagatccgc gagcagccgt gggggcggga	7140
gttcgcctg cgcgacccgg ccggcaactg cgtcacttc gtggccgagg agcaggactg	7200
acacgtgctca cgagatttcg attccaccgc cgcctctat gaaagggttg gcttcggaaat	7260
cgttttccgg gacgcggct ggtatgtcct ccagcgcggg gatctcatgc tggagttctt	7320
cgcccaccccc aacttggta ttgcagctta taatggttac aaataaagca atagcatcac	7380
aaatttcaca aataaagcat tttttcact gcattctagt tggggttgt ccaaactcat	7440

DEAV2004-0025.txt

caatgtatct tatcatgtct gtataccgtc gacctctagc tagagcttgg cgtaatcatg	7500
gtcatagctg tttccctgtgt gaaattgtta tccgctcaca attccacaca acatacgagc	7560
cggaaagcata aagtgtaaag cctgggggtgc ctaatgagtg agcttaactca cattaattgc	7620
gttgcgctca ctgcccgtt tccagtcggg aaacctgtcg tgccagctgc attaatgaat	7680
cggccaacgc gcggggagag gcgggttgcg tattgggcgc tcttccgtt cctcgctcac	7740
tgactcgctg cgctcggctcg ttccggctgcg gcgagcggta tcagctcaact caaaggcgg	7800
aatacggta tccacagaat caggggataa cgcagaaaaa aacatgtgag caaaaggcca	7860
gcaaaaaggcc aggaaccgta aaaaggccgc gttgctggcg ttttccata ggctccgccc	7920
ccctgacgag catcacaaaa atcgacgctc aagttagagg tggcgaaacc cgacaggact	7980
ataaaagatac caggcgtttc cccctggaaag ctccctcgctg cgcttcctg ttccgaccct	8040
gccgcttacc ggataacctgt ccgcctttct cccttcggga agcgtggcgc tttctcaatg	8100
ctcacgctgt aggtatctca gttcgggtgtt ggtcggtcg tccaaactgg gctgtgtgca	8160
cgaaccccccc gttcagcccg accgctgcgc cttatccgt aactatcgct ttgagtc当地	8220
cccggttaaga caccacttat cgccactggc agcagccact ggtacacagga ttagcagagc	8280
gaggtatgtt ggcggtgcta cagagttttt gaagtgggtgg cctaaactacg gctacactag	8340
aaggacagta ttggtatct ggcgtctgtt gaagccagtt accttcggaa aaagagttgg	8400
tagctcttga tccggcaaacc aaaccaccgc tggtagcggt ggtttttttt tttgcaagca	8460
gcagattacg cgccggaaaaa aaggatctca agaagatcct ttgatctttt ctacggggtc	8520
tgcgtctcg tggAACGAAA actcacgtt agggattttt gtcgtcgat tatcaaaaaag	8580
gatcttacc tagatccctt taaattaaaa atgaagttt aaatcaatct aaagtatata	8640
tgaatcaaact tggcttgaca gttaccatg cttaatcagt gaggcaccta tctcagcgat	8700
ctgtctttt cgttcatcca tagttgcctg actcccgctc gtgttagataa ctacgatacg	8760
ggagggttta ccatctggcc ccagtgcgtc aatgataccg cgagacccac gctcaccggc	8820
tccagattta tcagcaataa accagccagc cggaaggggcc gagcgcagaa gtggcttgc	8880
aactttatcc gcctccatcc agtctattaa ttgttgcgg gaagctagag taagtagttc	8940
gccagttaat agtttgcgca acgttgtgc cattgtaca ggcacgtgg tgtcacgctc	9000
gtcggttggat tggcttcat tcagctccgg ttcccaacga tcaaggcgag ttacatgatc	9060
ccccatgttg tgcaaaaaaaag cggttagctc cttcggtcct ccgatcggtt tcagaagtaa	9120
gttggccgca gtgttatcac tcgttttat ggcagactg cataattctc ttactgtcat	9180
gccatccgta agatgtttt ctgtgactgg tgagtactca accaagtcat tctgagaata	9240
gtgtatgcgg cgaccgagtt gctcttgccc ggcgtcaata cgggataata ccgcggccaca	9300
tagcagaact ttaaaagtgc tcgttcatgg aaaacgttct tcggggcgaa aactctcaag	9360
gatcttaccg ctgttgcgat ccagttcgat gtaaccact cgtgcaccca actgatcttc	9420
agcatctttt accttcacca gcgtttctgg gtgagcaaaa acaggaaggc aaaatgccgc	9480

19/19

DEAV2004-0025.txt

aaaaaaaggga ataagggcga cacggaaatg ttgaatactc atactcttcc tttttcaata	9540
ttattgaagc atttatcagg gttattgtct catgagcgg a tacatattt aatgtattta	9600
gaaaaataaaa caaatagggg ttccgcgcac atttccccga aaagtgccac ctgacgtc	9658